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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY



Building The
Wireless Future™

CTIA

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Randall S. Coleman
Vice President for
Regulatory Policy and Law

August 30, 1994

Mr. William Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW - Room 222
Washington, DC 20554

RE: *Ex Parte* Contact Concerning Personal Communications Services,
GEN Docket No. 90-314/and Auction Design for Broadband
Personal Communications Services, PP Docket No. 93-253

Dear Mr. Caton:

On Tuesday, August 30, 1994, the undersigned, on behalf of the Cellular Telecommunications Industry Association (CTIA), met with Ms. Jill Luckett, Special Advisor to Commissioner Rachelle B. Chong. The discussion concerned the population overlap and ownership attribution rules applicable to cellular companies in the Personal Communications Services (PCS) and the current rules governing eligibility to bid for the "entrepreneur's blocks" in the pending broadband PCS auctions. The issues summarized in the attachments and the views expressed in this meeting reflect CTIA's positions as previously filed in these proceedings.

Pursuant to Section 1.1206(a)(1) of the Commission's Rules, an original and one copy of this letter are being filed with your office. Please contact me if you have any questions concerning this submission.

Sincerely,

Randall S. Coleman

Attachments

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AUG 30 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

CTIA

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August 2, 1994

Mr. Byron Marchant
Senior Legal Advisor
to Commissioner Barrett
Federal Communications Commission
1919 M Street, N.W. - Room 826
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Randall S. Coleman
Vice President for
Regulatory Policy and Law

RE: Ex Parte Filing - Docket No. 90-314
Personal Communications Service

Dear Byron:

In response to your request for information, attached are a series of matrices outlining the nature and extent of the impact of the overlap rules on cellular service providers.

First is a copy of a letter which was originally filed with the Commission on June 6, 1994, transmitting a matrix for ten Major Trading Areas (MTAs) and a series of nine matrices for Basic Trading Areas (BTAs). These matrices demonstrate the impact of the overlap restrictions on selected cellular companies. The matrices also indicate the number of conflicts at differing overlap levels -- including both the current ten percent threshold and a sequence of higher thresholds.

Also attached are two updated tables, profiling some 80 BTAs.

The first updated table is a survey of the top 50 BTAs, ranked by population in descending order from most populous to less populous. It includes the population of the BTAs, according to 1994 estimates by Paul Kagan Associates, and notes the share of those "pops" served by cellular licensees, calculated in accordance with the Commission's *Second Report and Order* in GEN Docket No. 90-314.

This table demonstrates that raising the overlap threshold from 10 percent to 20 percent could benefit smaller cellular companies. In the top 50 BTAs, eight additional opportunities would be afforded to small cellular companies by a targeted increase in the overlap threshold to 20 percent. These 50 BTAs are home to 152.7 million people -- 58.3 percent of the estimated 261.7 million Americans. Raising the

overlap threshold would permit these small companies to compete for markets in which 8.6 million people live -- 5.6 percent of the population of those markets, and 3.2 percent of the American people.

- Raising the threshold to 20 % would create eight additional opportunities for small companies (starting at BTA 28 -- Charlotte, NC -- and extending down to BTA 50).
- Raising the threshold to 25 % would create three additional opportunities (for a total of eleven additional opportunities).

The second table is a survey of 30 selected BTAs, drawn from the BTAs below the top 50, and is also ranked in descending order according to population. In fact, they are approximately ranked as follows: Lafayette through Evansville, 100-104 from the top; Provo through Brownsville, 168-172 from the top; Williamsport through Danville, 273-277 from the top; Kankakee through Harrisonburg, 323-327 from the top; Ashtabula through Eagle Pass, 378-382 from the top; and Stillwater through Watertown, roughly 433-437 from the top. (Precise ranking depends on population growth from 1990 to 1994.)

These 30 markets are home to another 6.4 million people. Raising the overlap threshold (on a targeted basis) to 20 percent would create 12 additional opportunities for small cellular companies to extend their service areas, and compete in expanding the variety of wireless services available to Americans living outside the top markets, in rural and small town America.

- Raising the threshold to 20 % would create twelve additional opportunities for small companies in six BTAs in which 1.7 million Americans live.
- Raising the threshold to 25 % would create three additional opportunities (for a total of 15 additional opportunities in nine BTAs in which 2.26 million people live).
- Raising the threshold to 30 % would create three additional opportunities (for a total of 18 additional opportunities in ten BTAs in which 2.34 million people live).
- Raising the threshold to 35 % would create three additional opportunities (for a total of 21 additional opportunities in 12 BTAs in which 2.6 million people live).
- Raising the threshold to 40 % would create three additional opportunities (for a total of 24 additional opportunities in 14 BTAs in which 2.8 million people live).

These additional opportunities do not mean that there will be one less wireless provider than is theoretically possible at the maximum. Rather, they mean that there will be one or two or three more potential service providers with experience in the marketplace, and incentives to deliver on the promise of the information age to rural and small town America.

A final attachment is composed of a series of maps and overlays, which illustrate the anomalous effect noted in CTIA's recent Petition for Reconsideration -- in which the Commission's overlap rules and narrow divestiture "window" act to limit the ability of existing service providers to extend service to adjacent areas, or link existing service areas, in the broader wireless markets which the Commission has established.

If there are any questions in this regard, please contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "Randall S. Coleman", written in a cursive style.

Randall S. Coleman

Attachments





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June 6, 1994

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W. Room 222
Washington, D.C. 20554

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JUN - 6 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: Ex Parte Filing
GEN Docket No. 90-314
Personal Communications Services

Dear Mr. Caton:

On Monday, June 6, 1994, in response to a request from Mr. Byron F. Marchant, Legal Assistant to Commissioner Andrew Barrett, the Cellular Telecommunications Industry Association ("CTIA") provided copies of the attached analyses of the Commission's attribution and overlap rules, and their impact on cellular carriers at both the Major Trading (MTA) and Basic Trading Area (BTA) levels, to the following Commission staff:

Chairman Reed Hundt
Commissioner Andrew Barrett
Commissioner James Quello
Commissioner Susan Ness
Commissioner Rachelle Chong
Mr. Ralph Haller
Dr. Robert Pepper
Mr. Jim Casserly

Ms. Karen Brinkmann
Mr. Byron Marchant
Mr. Rudy Baca
Ms. Jane Mago
Ms. Roz Allen
Mr. Greg Rosston
Mr. Donald Gips
Mr. Greg Vogt

Pursuant to Sections 1.1206(a)(3) (non-restricted proceeding, presentation disclosure), 1.1204(b)(7) (exemption from prohibition), and 1.1203(a)-(b) (sunshine period prohibition) of the Commission's rules, an original and one copy of the above-referenced items are being filed with the Secretary's office.

If there are any questions in this regard, please contact the undersigned.

Sincerely,



Robert F. Roche



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June 6, 1994

Mr. Byron F. Marchant
Senior Legal Advisor to
Commissioner Barrett
Federal Communications Commission
1919 M Street, N.W. Room 826
Washington, D.C. 20554

RE: Ex Parte Filing
GEN Docket No. 90-314
Personal Communications Services

Dear Mr. Marchant:

Pursuant to your request, the attached matrix indicating Major Trading Area (MTA) and Basic Trading Area (BTA) conflicts has been revised to demonstrate the restrictions experience by cellular companies *based on the attribution and overlap rules adopted by the Commission's Second Report and Order* in GEN Docket No. 90-314.

Background on Exclusions and Partnerships

The companies listed within the matrix are those licensees explicitly impacted on an MTA basis by the overlap rules specified by that Order. The actual impact of the Order, both on an MTA basis and a BTA basis, is much broader than is indicated by the attached matrix, since the rule applies equally to investors holding a 20 percent equity interest in a licensee. Unfortunately, time did not allow for demonstration of such investor or partner conflicts.

Thus, for example, while we can note that the wireline cellular license in the New York *MSA* is held by a partnership, in which NYNEX holds 54.0 percent, Bell Atlantic holds 26 percent, and Sprint Cellular ten percent -- we cannot note the full extent of such partnerships throughout the New York *MTA*.

Likewise, we can note that the non-wireline cellular license in the Los Angeles *MSA* is held by a partnership of BellSouth (with 60.03 percent) and LIN Broadcasting (39.97 percent), and the wireline cellular license in the Los Angeles *MSA* is held by a partnership of AirTouch (82.3 percent), Contel (11.2 percent), U.S. Cellular (5.5 percent) and GTE Mobilnet (1.0 percent). But we cannot note the full extent of similar partnerships throughout the Los Angeles *MTA*.

June 6, 1994
Page 2



Additional BTA Conflicts

As noted in our previous submission of June 1, while the above matrix demonstrates the BTA conflicts of the companies restricted by the application of the rules on an MTA basis, the even more extensive impact of BTA conflicts is not indicated in that matrix. The tables and text which follow the MTA matrix indicate some of those further conflicts.

If you have any questions, please do not hesitate to contact me.

Very truly yours,


Robert F. Roche

Director for Research

Attachments

Revised Overlap Matrix for MTA-Barred Companies
(based on the FCC's 2nd Report and Order, GEN No. 90-314)

MTA	Number of BTAs in MTA	Number of Carriers Barred in MTA	Identities	Number of BTAs in Which Barred by 10% Rule	Number of BTAs in Which Barred by 20% Rule	Number of BTAs in Which Barred by 30% Rule	Number of BTAs in Which Barred by 40% Rule	MTA Eligibility Under Higher Cap?
Atlanta	14	5	Alltel BellSouth Palmer AirTouch GTE/Contel	3 7 4 3 4	3 7 4 3 4	3 7 4 3 4	3 7 4 3 3	Yes - 20% No Yes - 20% No Yes - 20%
Birmingham	10	4/5 (including licenses designated for hearing)	BellSouth GTE/Contel Crowley Palmer Designated for hearing	5 5 2 2 4	5 5 2 2 3	5 5 2 2 1	5 5 2 2 1	No No Yes - 20% Yes - 20% Yes - 20%
Boston	14	4	NYNEX SMB BAM U.S. Cellular	5 3 3 7	5 3 3 7	5 3 3 7	5 3 3 7	No No Yes - 30% Yes - 20%
Buffalo	4	5/6 (including McCaw partnership with Assoc.)	Ass./SMB NYNEX DICONN Contel Rochester McCaw	2 1 2 2 1 1	2 1 2 2 1 1	2 1 2 2 1 1	2 1 2 2 1 1	No No Yes - 20% No No No
Chicago	18	2	SMB Ameritech	8 9	8 9	7 9	7 9	No No

Note: Eligibility for MTA-wide licenses was considered under various thresholds *within the confines of CTIA's proposal* (i.e., with a 40 percent pop cap). The last column indicates eligibility at various thresholds below that cap.

Revised Overlap Matrix for MTA-Barred Companies
(based on the FCC's 2nd Report and Order, GEN No. 90-314)

MTA	Number of BTAs in MTA	Number of Carriers Barred in MTA	Identities	Number of BTAs in Which Barred by 10% Rule	Number of BTAs in Which Barred by 20% Rule	Number of BTAs in Which Barred by 30% Rule	Number of BTAs in Which Barred by 40% Rule	MTA Eligibility Under Higher Cap?
Des Moines	13	6	U.S. Cellular Sprint C-TEC GTE/Contel U S WEST Cellular Inc.	9 5 7 5 1 6	9 5 4 3 2 4	9 5 4 3 1 2	9 4 4 2 1 2	No Yes - 30% Yes - 20% Yes - 20% Yes - 20% Yes - 20%
Los Angeles	7	3/4 (including the McCaw share of the L.A. Cellular Partnership)	BellSouth AirTouch U S WEST McCaw (via L.A. Cellular Partnership)	2 2 1 3 (including L.A. Cellular Partnership)	2 2 1 3	2 2 1 3	2 2 1 3	No No Yes - 20 % No (based on L.A. Cellular)
New York	20	4	NYNEX BAM SNET LIN/McCaw	7 4 3 1	7 4 3 1	7 4 3 1	7 4 3 1	No Yes - 20% Yes - 20% No
Wash./Balt.	9	2	SMB BAM	8 4	5 4	4 4	4 4	No No

Note: Eligibility for MTA-wide licenses was considered under various thresholds *within the confines of CTIA's proposal* (i.e., with a 40 percent pop cap). The last column indicates eligibility at various thresholds below that cap.

Atlanta BTA Conflicts

Within the 14 BTAs that make up the Atlanta MTA, there are 39 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, four would be opened up by raising the overlap cap to 20 percent. Another five opportunities would be opened up by raising the overlap cap to 30 percent. And a final two opportunities would be opened up by raising the cap to 40 percent -- for a total of 11 additional BTA licensing opportunities.

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Mobile	Albany		25.0 percent	
Sterling	Macon Savannah		29.4 percent	34.9 percent
Cellular Plus	Macon		26.7 percent	
Cranford Cell.	Opelike		28.7 percent	
Signal	Savannah	19.6 percent		
Sprint	Savannah	19.6 percent		
Georgia RSA #8	Savannah	13.3 percent		
U.S.Cellular	Cleveland Savannah	15.1 percent	23.4 percent	
Mobile	Albany		25.0 percent	

Birmingham BTA Conflicts

Likewise, within the 10 BTAs that make up the Birmingham MTA, there are 32 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, four would be opened up by raising the overlap cap to 20 percent. Another five opportunities would be opened up by raising the overlap cap to 30 percent. And a final three opportunities would be opened up by raising the cap to 40 percent -- for a total of 12 additional BTA licensing opportunities. (The following table omits those licenses which have been designated for hearing -- although they are also subject to the overlap rule -- regardless of who obtains them.)

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Cranford Cell.	Anniston Birmingham	10.2 percent	28.0 percent	
ALGREG Cell.	Birmingham Florence	13.1 percent 15.8 percent		
Pro Max	Dothan Montgomery		22 percent	30.1 percent
S. Ala. Cell.	Dothan Montgomery		24.7 percent	30.1 percent
W. Ala. Cell.	Tuscaloosa			35.4 percent

Boston BTA Conflicts

Within the 14 BTAs that make up the Boston MTA, there are 36 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, two would be opened up by raising the overlap cap to 20 percent. Another opportunity would be opened up by raising the overlap cap to 30 percent. And another five opportunities would be opened up by raising the cap to 40 percent -- for a total of eight additional BTA licensing opportunities.

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Sterling Cell.	Bangor		26.0 percent	
Contel Cell.	Keene Lebanon			36.0 percent 32.0 percent
Atlantic Cell.	Lewiston	16.0 percent		
Fair Oaks Cell.	Manchester			36.9 percent
Franklin Cell.	Springfield	10.5 percent		
W. Maine Cell.	Lewiston			36.9 percent
StarCellular	Portland			35.2 percent

Buffalo BTA Conflicts

Within the four BTAs that make up the Buffalo MTA, there are 13 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, none would be opened up by raising the overlap cap to 20 percent. Another two opportunities would be opened up by raising the overlap cap to 30 percent. And another three opportunities would be opened up by raising the cap to 40 percent -- for a total of five additional BTA licensing opportunities. The following table omits those licenses which have been designated for hearing -- although they are also subject to the overlap rule -- regardless of who obtains them.)

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Horizon Master	Jamestown		24.0 percent	
Sprint Cell.	Jamestown		24.0 percent	
Pinellas Comm.	Olean			36.0 percent
Bell Atl. Mobile	Olean			36.0 percent

Chicago BTA Conflicts

Within the 18 BTAs that make up the Chicago MTA, there are 53 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, four would be opened up by raising the overlap cap to 20 percent. Another eight opportunities would be opened up by raising the overlap cap to 30 percent. And another opportunity would be opened up by raising the cap to 40 percent -- for a total of 13 additional BTA licensing opportunities.

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Sprint	Bloomington Fort Wayne		21.0 percent 20.0 percent	
Valley Cell.	Bloomington	18.0 percent		
W.K. Cellular	Danville		23.0 percent	
Indiana RSA #5	Danville		23.0 percent	
Cell. of Indiana	Decatur	13.0 percent		
First Cell. of So. Illinois	Decatur	13.0 percent		
U.S. Cellular	Elkhart Fort Wayne Rockford	13.0 percent	29.0 percent	31.0 percent
Century Cellunet	Elkhart		20.0 percent	
SWB	Kankakee		24.0 percent	
Illinois Valley Cellular	Kankakee		24.0 percent	
Ill. Indep. RSA #3	Peoria	17.0 percent		

Des Moines BTA Conflicts

Within the 13 BTAs that make up the Des Moines MTA, there are 51 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, 14 would be opened up by raising the overlap cap to 20 percent. Another nine opportunities would be opened up by raising the overlap cap to 30 percent. And another opportunity would be opened up by raising the cap to 40 percent -- for a total of 24 additional BTA licensing opportunities.

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Illinois Indep. RSA # 3	Burlington		21.1 percent	
Iowa RSA 12 Part.	Dubuque Waterloo	10.4 percent	24.5 percent	
Iowa RSA 10	Des Moines	13.6 percent		
Excellence II	Sioux City		25.0 percent	
Iowa East Cell.	Cedar Rapids	14.6 percent		
Plus Cellular	Dubuque		27.6 percent	
C-TEC	Des Moines Cedar Rapids Des Moines	13.8 percent 13.9 percent	24.5 percent	
Contel	Dubuque	12.5 percent		
ELLERON Cell.	Dubuque	10.4 percent		
Cellular Ventures	Sioux City Fort Dodge	11.2 percent 14.9 percent		
CommNet Cellular Inc.	Des Moines Fort Dodge Iowa City Ottumwa	11.4 percent 16.5 percent	28.6 percent 27.3 percent	
General Cell.	Sioux City	15.3 percent		

Los Angeles BTA Conflicts

Within the six BTAs that make up the Los Angeles MTA, there are 16 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, two would be opened up by raising the overlap cap to 20 percent.

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Satellite Cell.	Las Vegas	10.7 percent		
Mohave Cell.	Las Vegas	10.7 percent		

New York BTA Conflicts

Within the 20 BTAs that make up the New York MTA, there are 46 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, five would be opened up by raising the overlap cap to 20 percent. One more opportunity would be opened up by raising the overlap cap to 30 percent. And another three opportunities would be opened up by raising the cap to 40 percent -- for a total of nine additional BTA licensing opportunities.

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Sterling Cell.	Albany	10.4 percent		
FutureWave	Elmira	19.6 percent		
Americell	Elmira	12.8 percent		
New York RSA #4	Syracuse	16.4 percent		
Pegasus Cell.	Syracuse	16.4 percent		
DICOMM	Elmira			31.6 percent
Crowley	Elmira		29.9 percent	
Cellular One	Poughkeepsie			38.6 percent

Washington/Baltimore BTA Conflicts

Within the nine BTAs that make up the Washington/Baltimore MTA, there are 28 conflicts between cellular carriers and PCS licensing opportunities under a 10 percent overlap rule. Of those opportunities, seven would be opened up by raising the overlap cap to 20 percent. Another two opportunities would be opened up by raising the overlap cap to 30 percent. And another two opportunities would be opened up by raising the cap to 40 percent -- for a total of 11 additional BTA licensing opportunities.

Company	BTA Names	Overlap 10-20	Overlap 20-30	Overlap 30-40
Contel Cell.	Charlottesville	11.5 percent		
SWB	Charlottesville Cumberland Hagerstown	17.7 percent 18.3 percent	23.2 percent	
Sprint	Hagerstown			36.1 percent
Bell. Atl. Mobile	Fredericksburg		26.7 percent	
CIS	Hagerstown			36.1 percent
Northern Communications	Cumberland	18.3 percent		



Top 50 BTA Service Profile

BTA Name	Total Pops	Carriers in Market	Carrier Pops	% Overlap
New York	18,315,000	LIN/McCaw NYNEX Mobile SBN Vanguard Comcast SNET Mobility Sussex Cell. Cell. One of Upstate NY	15,554,700 16,766,000 1,664,000 328,900 1,531,200 805,600 137,100 72,600	85 % 91.5 % 9.1 % 1.8 % 8.4 % 4.4 % 0.7 % 0.4 %
Los Angeles	15,866,000	AirTouch BellSouth LIN/McCaw GTE/Contel General Cell.	15,847,800 15,137,400 710,400 18,700 18,700	99.9 % 95.4 % 4.5 % 0.1 % 0.1 %
Chicago	8,515,000	SMB Mobile Ameritech Cell. Comcast GTE/Contel U.S. Cellular	8,176,900 8,294,900 78,000 122,500 82,500	96 % 97.4 % 0.9 % 1.4 % 1.0 %
San Francisco	6,830,000	AirTouch/jv McCaw GTE Mobilnet GTE/Contel U.S. Cellular Cellular 2000	5,449,500 941,700 6,645,400 144,500 144,500 40,300	80.1 % 13.8 % 97.3 % 2.1 % 2.1 % 0.6 %
Philadelphia	6,040,000	SBN Comcast U.S. Cellular	6,040,000 5,981,200 138,900	100 % 97.7 % 2.3 %
Detroit	4,789,000	AirTouch/CCI Ameritech Cell. Sprint Cell. Lake Huron Cell. Thumb Cell.	4,747,600 4,610,100 137,500 41,100 41,100	99.1 % 96.3 % 2.9 % 0.9 % 0.9 %
Dallas-Ft. Worth	4,766,000	SMB Mobile LIN GTE Mobilnet McCaw Cell.S Sprint Peoples Cell. Lone Star Cell.	4,533,900 4,372,200 15,500 192,200 143,400 7,700 43,100	95.1 % 91.7 % 0.3 % 4.0 % 3.0 % 0.2 % 0.9 %
Wash., DC	4,428,000	SMB Mobile SBN GTE/Contel Shenandoah Mobile U.S. Cellular MCC Cellular Horizon	4,116,300 4,256,200 125,400 6,880 39,300 145,600 165,800	92.9 % 96.1 % 2.8 % 0.15 % 0.9 % 3.3 % 3.7 %
Boston	4,132,000	NYNEX Mobile SMB Mobile Vanguard Starcellular	4,022,400 4,022,400 110,000 110,000	97.3 % 97.3 % 2.7 % 2.7 %
Houston	4,412,000	GTE Mobilnet LIN/McCaw Meter Cell. Estex Cell. Texas 16 Cell. Tel. Alcee Comm's	4,253,000 4,216,500 13,100 158,900 162,100 20,200	96.4 % 95.6 % 0.3 % 3.6 % 3.7 % 0.5 %

Miami	3,485,000	BellSouth McCaw GTE Mobilnet	3,485,000 3,402,800 81,800	100 % 97.6 % 2.3 %
Atlanta	3,592,000	BellSouth AirTouch U.S. Cellular Intercol Blackwater Cell. Other+	3,363,700 3,135,100 104,400 121,100 162,500 65,000	93.6 % 87.3 % 2.9 % 3.4 % 4.5 % 1.8 %
Cleveland	2,948,000	AirTouch/CCI GTE Mobilnet Cell Wave Sprint Cell.	2,806,100 2,806,100 141,500 141,500	95.2 % 95.2 % 4.8 % 4.8 %
Minneapolis	3,044,000	McCaw U S WEST Pacific Telecom U.S. Cellular West Central Cell. LP Pacific NW Cell. Rural Cell. Corp. Cellular 7 Partnership Minnesota Southern Cell. Tel. Minnesota RSA 10 LP Century Cellunet	2,624,600 2,624,600 15,200 34,500 34,500 42,000 125,300 54,700 82,600 82,600 83,300	86.2 % 86.2 % 0.5 % 1.1 % 1.1 % 1.4 % 4.1 % 1.8 % 2.7 % 2.7 % 2.7 %
St. Louis	2,818,000	SMB Mobile Ameritech Cell. LFB Inc. Rural Cell. Management First Cell. of S. Ill. U.S. Cellular	2,749,500 2,645,700 20,800 34,700 34,700 48,600	97.6 % 94.6 % 0.7 % 1.2 % 1.2 % 1.7 %
Seattle	2,951,000	McCaw U S WEST San Juan Cell. LP	2,951,000 2,777,600 259,500	100 % 94.1 % 8.8 %
San Diego	2,732,000	U S WEST AirTouch	2,732,000 2,732,000	100 % 100 %
Pittsburgh	2,496,000	BAN McCaw Horizon Cell. Sprint U.S. RSA Telco Partners	2,263,600 2,079,400 232,200 158,400 184,200	90.7 % 83.3 % 9.3 % 6.3 % 7.3 %
Phoenix	2,662,000	BAN U S WEST Gila River Cell. Genl. Partnership SE Arizona LP Jaybar Comm'n	2,526,100 2,336,800 169,300 37,300 37,300	94.9 % 88.5 % 6.4 % 1.4 % 1.4 %
Baltimore	2,534,000	BAN SMB Mobile WCC Cellular	2,534,000 2,445,800 88,000	100 % 96.5 % 3.5 %
Tampa	2,404,000	McCaw GTE Mobilnet Indep. Cell. Network Ten-Ten Genl. Partnership Other+	2,306,800 2,328,100 21,300 75,500 75,500	96 % 96.8 % 0.9 % 3.1 % 3.1 %

Denver	2,282,000	McCaw U S WEST Alfred DiRico ComNet Cell. Union Cell. Celludyne Member Market 352 CO	2,119,800 2,119,800 61,500 150,700 36,400 27,400 25,400	92.9 % 92.9 % 2.7 % 6.6 % 1.6 % 1.2 % 1.1 %
Cincinnati	2,083,000	AirTouch/CCI Ameritech Cell. Danbury GTE/Contel Florida Metro SE Indiana Cell. Telco. GTE Mobilnet BellSouth	1,959,800 1,996,400 25,300 76,100 21,500 39,500 21,500 61,900	94.1 % 95.8 % 1.2 % 3.7 % 1.0 % 1.9 % 1.0 % 2.9 %
Kansas City	1,934,000	AirTouch/McCaw SMB Mobile U.S. Cellular Sterling Cell. Liberty Cell. Ameritech Cell. ALLTEL Mid-Missouri Cellular	1,526,100 1,683,100 129,200 121,600 151,400 99,400 109,700 99,400	78.9 % 87.0 % 6.7 % 6.3 % 7.8 % 5.1 % 5.7 % 5.1 %
Milwaukee	1,806,000	BellSouth Ameritech Cell. Pacific Telecom	1,806,000 1,727,000 79,200	100 % 95.6 % 4.3 %
Portland	1,855,000	Pacific NW Cell. McCaw GTE Mobilnet Fibercom Oregon RSA 3 Cook County Point RSA 2 RSA 4 Crystal	43,000 1,591,200 1,753,500 8,100 8,100 7,000 43,000 43,100 43,000 172,300	2.3 % 83.8 % 94.5 % 0.4 % 0.4 % 0.4 % 2.3 % 2.3 % 2.3 % 9.3 %
Sacramento	1,886,000	U.S. Cellular McCaw AirTouch Nadec Cellular Pacific Sierra Cellular Atlantic Cell. Data Cell	50,900 1,591,200 1,648,000 50,900 35,900 151,000 151,000 95,000	2.7 % 84.4 % 87.4 % 2.7 % 1.9 % 8.0 % 8.0 % 4.9 %
Charlotte	1,798,000	BAN ALLTEL Mobile U.S. Cellular Bravo Other 1 Other 2 Sprint Cell	1,151,300 1,205,900 288,700 376,700 288,700 376,700 45,400	64. % 61.5 % 11.2 % 20.9 % 11.2 % 20.9 % 2.5 %
Norfolk	1,737,000	SMB Mobile Sprint Cell. GTE/Contel U.S. Cellular BAN	45,300 1,662,700 1,579,500 96,500 32,300	2.6 % 95.7 % 90.9 % 5.6 % 1.9 %
San Antonio	1,665,000	Kent S. Foster McCaw Tx RSA 15 LP SMB Mobile GTE/Contel U.S. Cellular TX 16 Cell. Tel.	74,000 1,417,800 74,000 1,573,800 17,600 156,000 17,600	4.4 % 85.2 % 4.4 % 94.5 % 1.1 % 9.4 % 1.1 %

Providence	1,524,000	BAM NYNEX	1,524,000 1,524,000	100 % 100 %
Columbus	1,573,000	GTE Mobile AirTouch/CCI Ameritech/ Sterling Minford Sprint Cell. Cellwave	1,333,300 1,361,700 28,400 27,000 27,000 184,500 184,500	84.8 % 86.6 % 1.8 % 1.7 % 1.7 % 11.7 % 11.7 %
Nashville	1,532,000	GTE/Contel U.S. Cellular BellSouth Nexus Cell. LP Tenn. RSA #3 LP Advantage Cell. Ten Woodland Rd. Corp.	1,320,000 156,300 1,195,600 122,800 29,700 122,800 61,600	86.2 % 10.2 % 78.0 % 8.0 % 1.9 % 8.0 % 4.0 %
Memphis	1,448,000	GTE/Contel BellSouth R&D Cellular Cellular Holding Sterling ALLTEL Mercury Cellular Mississippi 6 Cell.	1,124,400 1,240,700 7,700 121,000 85,700 85,700 168,000 12,000	77.7 % 85.7 % 0.5 % 8.4 % 5.9 % 5.9 % 11.6 % 0.8 %
New Orleans	1,406,000	Radiofone BellSouth Mobilnet Cellular Holding RSA Cell. Corp. Cellular XL Louisiana 8 Corp.	1,214,600 1,236,600 108,800 40,700 42,000 48,700 108,000	86.4 % 89.4 % 7.7 % 2.9 % 2.9 % 2.9 % 7.7 %
Louisville	1,412,000	GTE/Contel BellSouth Horizon Cell. U.S. Cellular Bluegrass Cell. SE Indiana Cell. Alpha Cellular Ameritech	1,085,100 952,900 218,800 66,700 389,000 53,100 67,500 9,600	76.7 % 67.5 % 14.9 % 4.7 % 21.9 % 3.8 % 4.8 % 0.7 %
Indianapolis	1,401,000	BellSouth GTE Mobilnet SE Indiana Cell. Indiana 5 RSA LP Florida Metro	1,358,300 1,348,000 32,300 32,300 18,000	96.9 % 97.7 % 2.3 % 2.3 % 1.3 %
Salt Lake City	1,428,000	U S WEST McCaw Comnet Cell. Union Cellular American Rural Cell. AirTouch Omni Cell. Part.	1,263,000 1,238,700 82,100 29,400 66,500 9,400 24,600	88.5 % 86.7 % 5.7 % 1.7 % 4.7 % 0.7 % 1.7 %
Oklahoma City	1,346,000	McCaw SBS Mobile U.S. Cellular Debon Cell. SW Oklahoma Cell. Systems Seener Cellular Enid Cellular	1,095,700 1,043,200 73,900 119,900 9,900 120,700 49,700	81.4 % 78.9 % 5.5 % 8.9 % 0.7 % 8.9 % 3.7 %
Orlando	1,423,000	McCaw BellSouth ALLTEL Mobile	1,423,300 1,389,600 33,800	100 % 97.6 % 2.4 %

Greensboro, NC	1,299,000	GTE Mobilnet Sprint Cell. BAM ALLTEL Clear Comm. U.S. Cellular Carolina West Blue Ridge Cellular	962,300 1,080,700 23,200 23,200 157,200 88,300 195,500 38,300	74.1 % 83.2 % 1.8 % 1.8 % 12.1 % 6.8 % 15.1 % 2.9 %
Buffalo	1,231,000	Rochester/NYNEX Associated/SMB DICONN GTE/Contel	1,187,400 1,187,400 43,600 43,600	96.5 % 96.5 % 3.5 % 3.5 %
Dayton	1,246,000	AirTouch/CCI Ameritech Cell.	1,246,000 1,246,000	100 % 100 %
Birmingham	1,245,000	BellSouth GTE/Contel S. Alabama Cell. ALLTEL Dominion Cell. Onesanta	1,029,200 902,600 52,000 51,500 52,000 41,000	82.7 % 72.5 % 4.2 % 4.1 % 4.2 % 3.3 %
Jacksonville, FL	1,229,000	McCaw BellSouth ALLTEL Mobile Sterling Cell. U.S. Cellular Larson Cell.	1,019,300 1,019,300 170,800 39,200 123,100 86,900	82.9 % 82.9 % 13.9 % 3.2 % 10.0 % 7.1 %
Hartford, CT	1,115,000	BAM SNET Mobility	1,115,200 1,115,200	100 % 100 %
Rochester, NY	1,142,000	Associated/SMB Rochester/NYNEX DICONN GTE/Contel NY RSA #4 LP Pannepack Cell.	1,023,500 1,023,500 61,100 61,100 57,100 57,100	89.6 % 89.6 % 5.4 % 5.4 % 5.0 % 5.0 %
Raleigh-Durham	1,203,000	Sprint Cell. GTE Mobilnet U.S. Cellular	1,282,500 787,500 415,000	100 % 65.5 % 34.5 %
Richmond	1,155,000	GTE/Contel BellSouth Sprint Cell. SMB Mobile BAM U.S. Cellular	1,121,200 791,000 227,300 87,000 44,000 37,200	97.1 % 68.5 % 19.7 % 7.6 % 3.8 % 3.2 %
Albany	1,056,000	Associated NYNEX Cellular One of Upstate NY Adirondack Cellular Tel. Sterling Cellular Hudson Valley RSA Cell. Pt. GTE/Contel	853,600 887,400 33,800 58,500 58,500 109,800 109,800 58,500	80.8 % 84 % 3.2 % 5.5 % 5.5 % 10.4 % 10.4 % 5.5 %

§ Pops do not include share of joint venture ("JV"), which would raise figure to approximately 6.3 million attributable pops in San Francisco STA, an overlap of roughly 92.6 percent.

+ Other refers to small split markets operated by small providers, not members of CTIA's Small Operator Caucus.